




Date: Wednesday, 2/20/2008 4:22:14 PM
 User: Kim Johnston

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : R/H STEP ASSY	
Job Number : 37533		
Estimate Number : 13170		
P.O. Number :	Part Number : D3724042	
This issue : 2/20/2008 S.O. No. :	Drawing Number : D3724 U/R	
Prsht Rev. : NC	Project Number : N/A	
First Issue : / / Type : LARGE FAB ASSY	Drawing Revision : U/R	
Previous Run : 37532	Material :	
Written By : 	Due Date : 3/10/2008	Qty: 1 Um: Each
Checked & Approved By : 		
Comment : Est Rev: A new issue 08-02-07 DD verified by:		

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
---------	-----------------------	---------------

1.0	D2622120C	Extrusion
-----	-----------	-----------



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Qty	Part #	Description	Batch:
1	D2622-120C	Extrusion	B 335618
			B 34694

Check Material for any Dents or Defects

Handwritten signature
 08-02-25

2.0	LARGE FAB 1	LARGE FABRICATION RESOURCE 1
-----	-------------	------------------------------



Comment: LARGE FABRICATION RESOURCE 1

1-Cut D3737-1 as per dwg D3737 = B 335618

2-Cut D3738-1 as per dwg D3738 = B 34694

3-Deburr and bevel ends for welding

Handwritten signature
 08-02-25

Handwritten signature
 08-02-25

Handwritten signature
 08-02-25

3.0	QC5	INSPECT WORK TO CURRENT STEP
-----	-----	------------------------------



Comment: INSPECT WORK TO CURRENT STEP

Handwritten signature
 08-02-25

4.0	D37331	GUSSET
-----	--------	--------



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

GUSSET
 batch B 37297

Handwritten signature
 08-02-25

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 2/20/2008 4:22:14 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: R/H STEP ASSY

Job Number: 37533

Part Number: D3724042

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

1-Weld D3738-1, D3737-1 and D3733-1 as per dwg D3724

2-Grind flush

8/08.02.25
8/08.02.25

6.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

PD 0802-25

7.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

8/08.02.25

8.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

M. 08/02/26

IX

9.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

8/08.02.27

10.0

D2734

206 Step Endplate



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

206 Step Endplate

batch 336520

8/08.03.14

11.0

D37281

PLATE



Comment: Qty.: 3.0000 Each(s)/Unit Total : 3.0000 Each(s)

PLATE

batch B37579

X

12.0

D37291

PLATE



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

PLATE

batch B 375800 x(1)

X

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 2/20/2008 4:22:14 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: R/H STEP ASSY

Job Number: 37533

Part Number: D3724042

Job Number:



Seq. #:

Machine Or Operation:

Description :

13.0

D37301

ANGLE



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)

ANGLE

batch

37516 x (8)

~~08-03-14~~ 1

14.0

D37411

ANGLE



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)

ANGLE

batch

37400 x (6), B 37762 x (2)

15.0

MS20470AD511

Rivet



Comment: Qty.: 12.0000 Each(s)/Unit Total : 12.0000 Each(s)

Rivet

batch

m107100 x (3)

mf 08-03-13

16.0

MS20470AD516

Rivet



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

Rivet

batch

m107100 x (3)

mf 08-03-13

17.0

CR321354

Cherry Rivet



Comment: Qty.: 32.0000 Each(s)/Unit Total.: 32.0000 Each(s)

Cherry Rivet

batch

m107100

08-03-13

18.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

1-Apply Magnobond before installing rivets

A/R Magnobond 6398 Batch: m104677

mf 08-03-13

2-Rivet D3741-1 and D3730-1 to brackets before installing on step as per dwg D3724

3-Transfer holes from D3730-1 and D3741-1 into step as per dwg D3724

4-Deburr

08-03-14 1
08-03-14 1
08-03-14 1

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	
08-03-12	18	Took 9 rivets ms20470ADS16 (instead of ms20470ADS11) and cut down to fit angle 3730-1	mf.	08-03-12	3	lf 08-03-13	08/03/13	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
08-03-13	18	- rivet was too short for bracket, rivet expanded hole in angle bracket while taking it out.	mf.	- scrap & destroy. Qty 8 angle and replace 3730-1. B #37576	mf. 08-03-13	08/03/13	08/03/13	08/03/13
		- Ø of holes are now too big.						
		R.C. Hummer error short and rivets were too short.						

NOTE: Date & initial all entries

Date: Wednesday, 2/20/2008 4:22:14 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: R/H STEP ASSY

Job Number: 37533

Part Number: D3724042

Job Number:



Seq. #:

Machine Or Operation:

Description :

5- realodine holes

19.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

1-Apply magnabond as per dwg D3724

A/R Magnabond 6398 Batch: mj102695

2-Rivet brackets in place on step as per dwg D3724

3-Weld both end cap as per Dwg D3724

4-Grind end cap welds flush

Inspect for foreign object per QSI 024

Handwritten notes:
1 08.03.14
1 08.03.14
1 08.03.14
1 08.03.14

20.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

Handwritten: PD 08.03.15 (D)

21.0

QC5

INSPECT WORK TO CURRENT STEP



**ENGINEERING
APPROVAL**



Comment: INSPECT WORK TO CURRENT STEP

Handwritten: 188 08.03.15 / 08.03.15

22.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

Handwritten: m. h / a.m 08/03/15

Handwritten: (1X)

23.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

Handwritten: M 107005

Handwritten: (D)

Handwritten: 08.03.17

24.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

Handwritten: 08/03/17 (D)

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 2/20/2008 4:22:14 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: R/H STEP ASSY

Job Number: 37533

Part Number: D3724042

Job Number:



Seq. #:

Machine Or Operation:

Description :

25.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: Wing Walk as per Dwg D3043 and QSI 005.4.4

m107385
FZ 08/03/17 (X)

26.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

08/03/17 (1)

27.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: *PPP-37519*

AS 08/03/17 (X)

28.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

08/03/17

Job Completion



u 08-03-17
POSITIVE RESULT

EFFECTIVE *08-07-24* *1511*

RELEASED *AS* *08-03-17*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

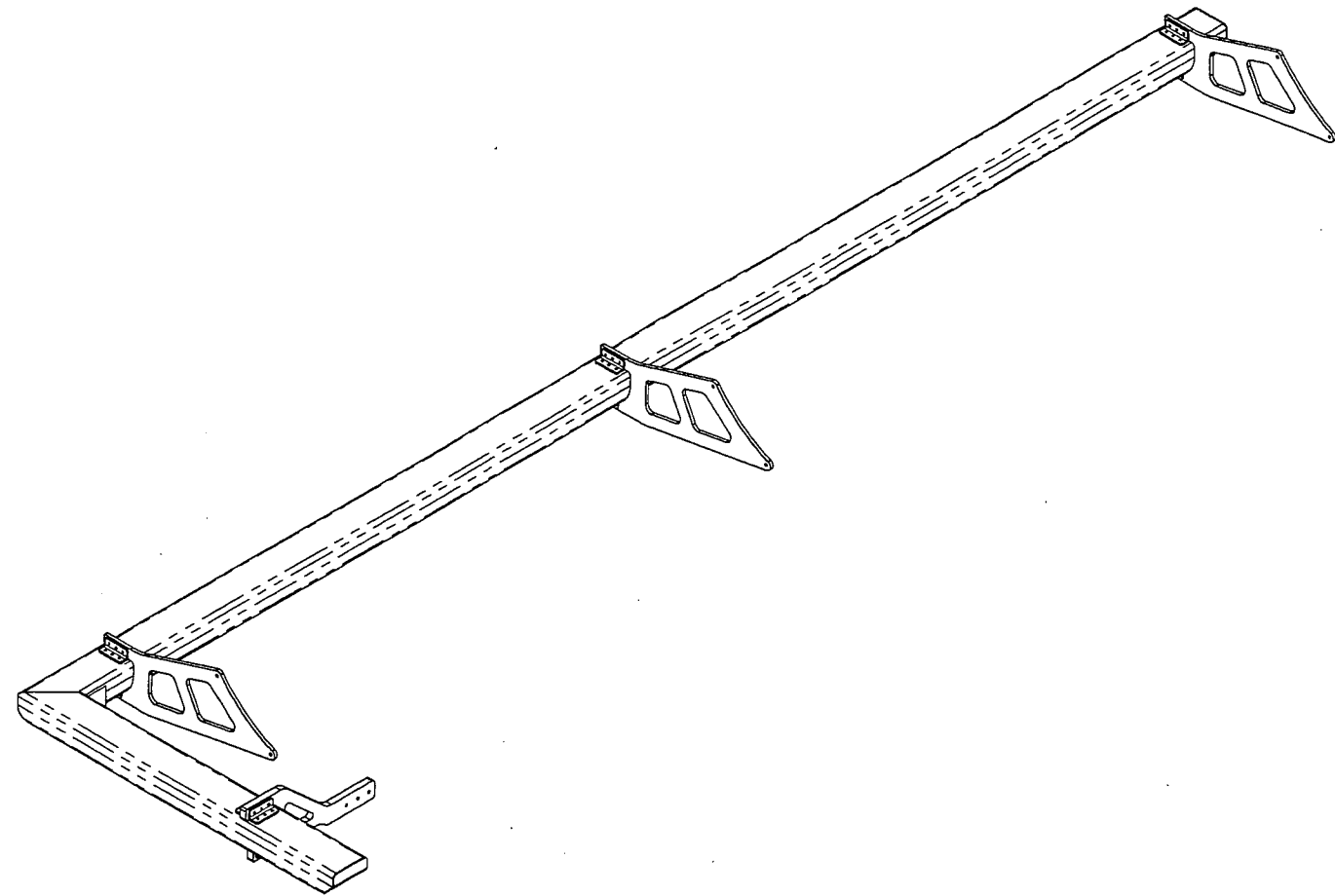
8 7 6 5 4 3 2 1

D

C

B

A



D3724-042 STEP ASSY

NOTES:

- 1) MATERIAL: NONE
- 2) FINISH: CHEMICAL CONVERSION COAT WELDMENT PER DART QSI 005 4.1 PRIOR TO ASSEMBLY
POWDER COAT ENTIRE ASSEMBLY WHITE GLOSS (4.3.5.1) PER DART QSI 005 4.3
APPLY BLACK ANTI-SKID PER DART QSI 005 4.4 WHERE INDICATED
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 13.91 lbs
- 8) WELDING: PER DART QSI 004
- 9) APPLY MAGNOBOND 6398 BETWEEN MATING SURFACES WHERE INDICATED

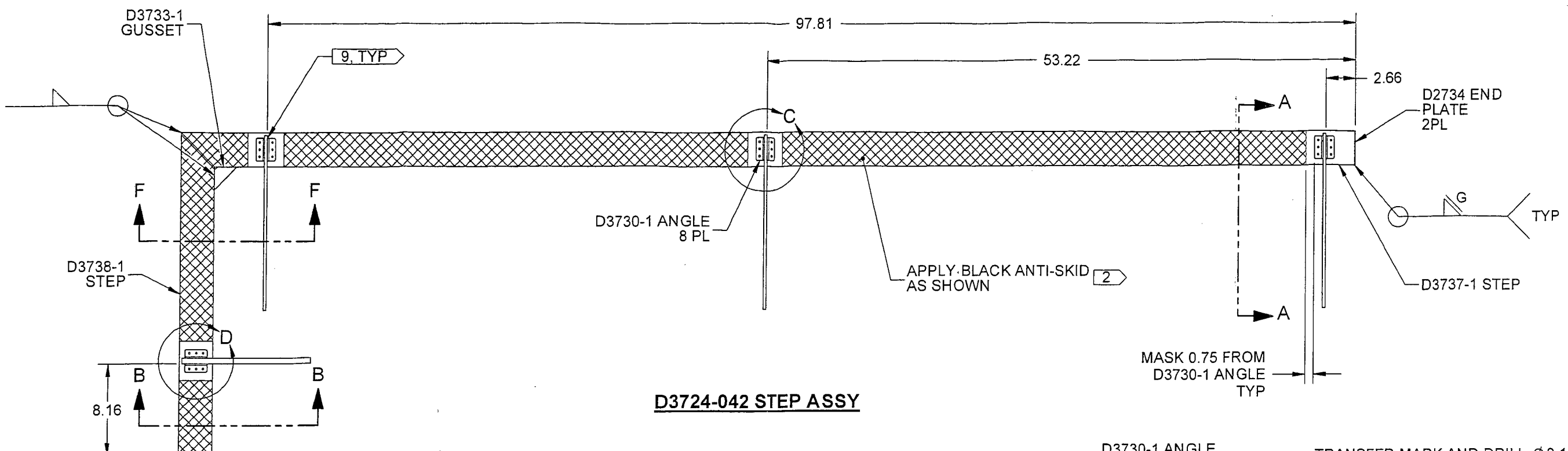
QTY -042	P/N	DESCRIPTION
X	D3724-042	STEP ASSY
2	D2734-1	END PLATE
3	D3728-1	STEP BRACKET
1	D3729-1	STEP BRACKET
8	D3730-1	ANGLE
1	D3733-1	GUSSET
1	D3737-1	STEP
1	D3738-1	STEP
8	D3741-1	ANGLE
32	CR3216-5-4	RIVET
3	MS20470AD5-11	RIVET
1	MS20470AD5-16	RIVET

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 37533

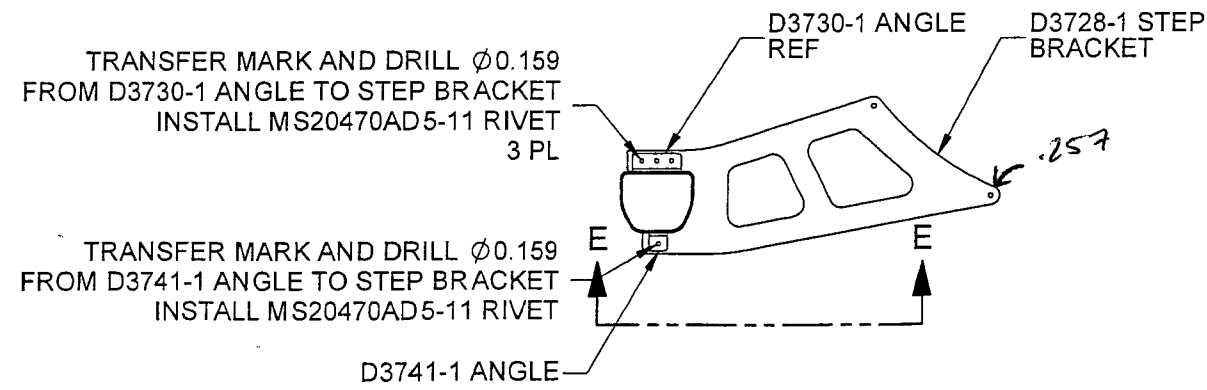
PRELIMINARY ISSUE
LE 08.02.15

A	NEW ISSUE	AJS	08.02.04
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	JS		
CHECKED	LE	DRAWING NO.	REV. A
MFG. APPR.		D3724	SHEET 1 OF 2
APPROVED		TITLE	SCALE
DE APPR.	LE	STEP ASSY	NTS
DATE	08.02.04	COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

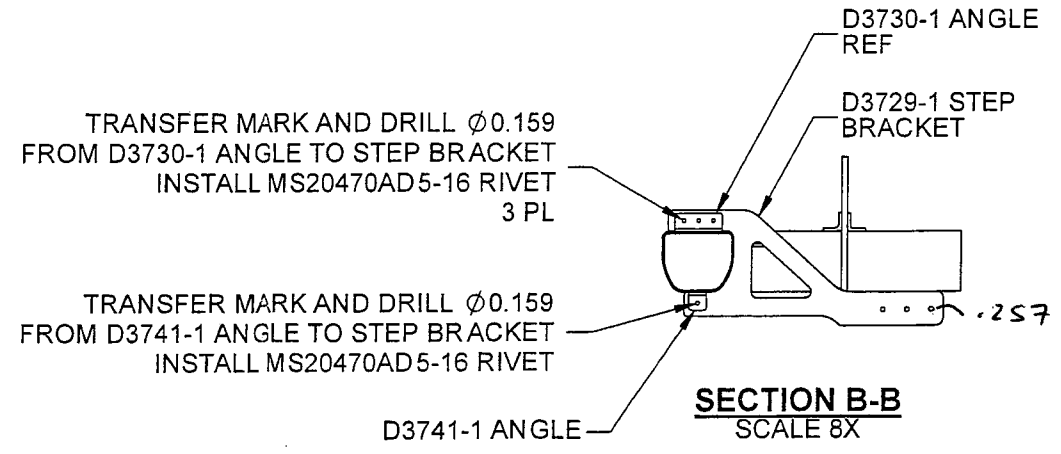
8 7 6 5 4 3 2 1



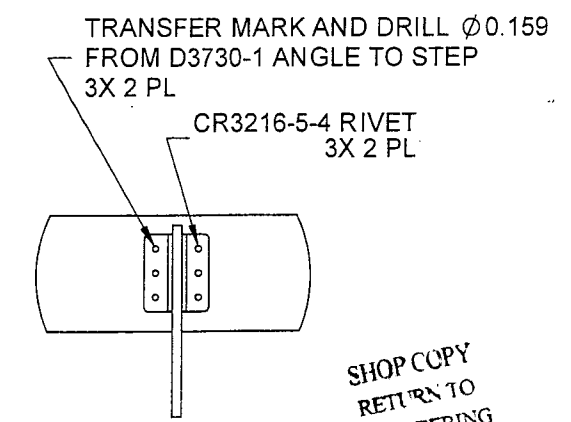
D3724-042 STEP ASSY



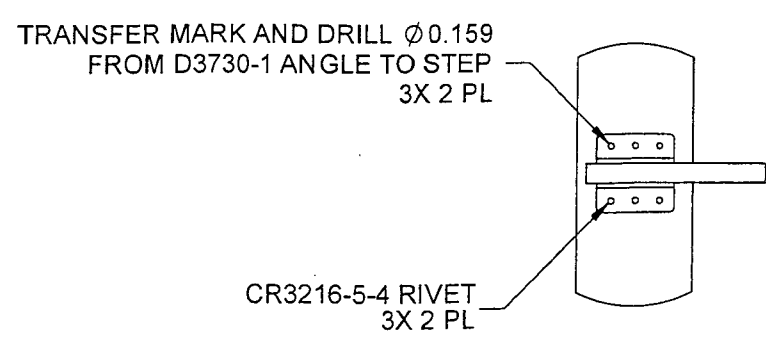
SECTION A-A
SCALE 8X
(TYP, 3 PL)



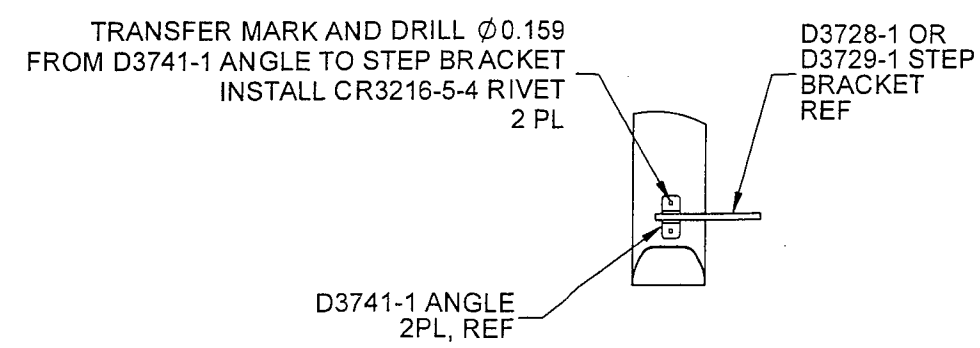
SECTION B-B
SCALE 8X



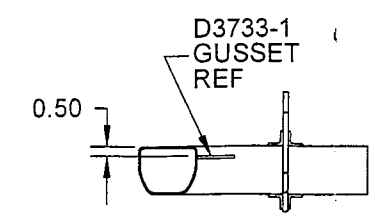
DETAIL C
SCALE 5X
(TYP, 3 PL)



DETAIL D
SCALE 5X



SECTION E-E
SCALE 8X
(TYP, 4 PL)

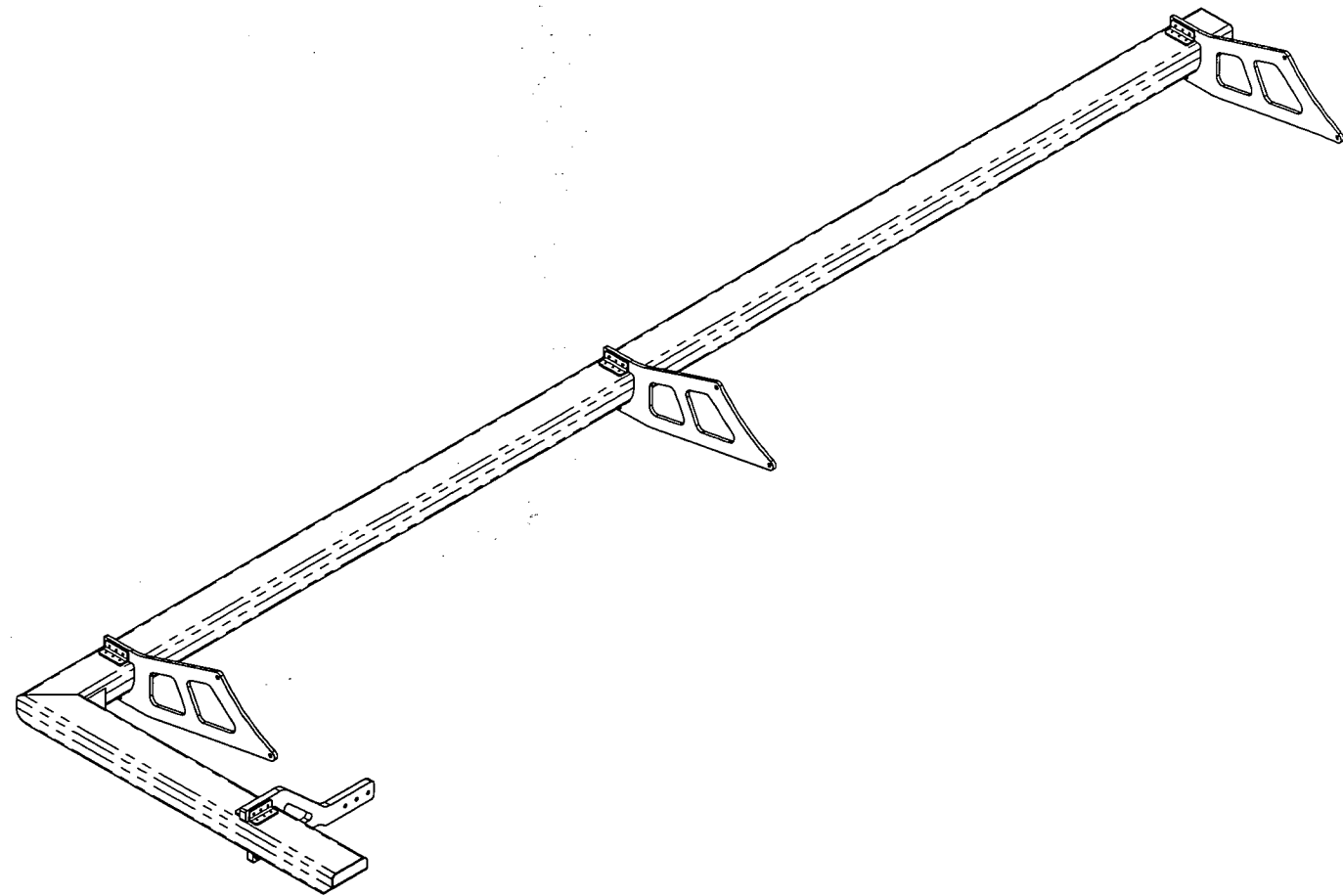


SECTION F-F
SCALE 10X

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED CO.
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 37533

PRELIMINARY ISSUE
LE 08.02.15

DESIGN	AJS	DART AEROSPACE LTD	
DRAWN	MS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	LE	DRAWING NO. D3724	REV. A
MFG. APPR.		SHEET 2 OF 2	
APPROVED		TITLE STEP ASSY	SCALE NTS
DE APPR.		COPYRIGHT © 2008 BY DART AEROSPACE LTD	
DATE 08.02.04		THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



D3724-042 STEP ASSY (SHOWN)

D3724-041 STEP ASSY (OPPOSITE) 

QTY -041	QTY -042	P/N	DESCRIPTION
X		D3724-041	STEP ASSEMBLY
	X	D3724-042	STEP ASSEMBLY
2	2	D2734-1	END PLATE
8	8	D3730-1	ANGLE
1	1	D3733-1	GUSSET
1		D3737-1	STEP
	1	D3737-2	STEP
1		D3738-1	STEP
	1	D3738-2	STEP
1	1	D3747-1	DECAL
32	32	CR3216-5-4	RIVET
12	12	MS20470AD5-11	RIVET
4	4	MS20470AD5-16	RIVET
8	8	D3741-1	ANGLE
3	3	D3728-1	STEP BRACKET
1	1	D3729-1	STEP BRACKET

RELEASED
08-03-17

NOTES:

- 1) MATERIAL: NONE
- 2) FINISH: CHEMICAL CONVERSION COAT WELDMENT PER DART QSI 005 4.1 PRIOR TO ASSEMBLY
POWDER COAT ENTIRE ASSEMBLY WHITE GLOSS (4.3.5.1) PER DART QSI 005 4.3
APPLY BLACK ANTI-SKID PER DART QSI 005 4.4 WHERE INDICATED
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 13.89 lbs
- 8) WELDING: PER DART QSI 004
- 9) APPLY MAGNOBOND 6398 BETWEEN MATING SURFACES WHERE INDICATED
- 10) TOUCH UP CHEMICAL CONVERSION COAT ON ALL PARTS TRANSFER-DRILLED. (REF QSI 005 4.1)

B	ADD -041 ASSEMBLY. ADD D3747-1 DECAL TO P/L. SHEET 2 TRANSFER MARKING INSTRUCTIONS FOR INSTALLING D3730-1 & D3741-1 ON D3728-1 & D3729-1 DELETED. SHEET 2 DETAIL C, D & SECTION E-E Ø0.159 WAS Ø0.098. ZONE D4 53.16 DIM WAS 53.22, 2.60 DIM WAS 2.66. ADD SECTION G-G.	AJS	08.02.26
A	NEW ISSUE	AJS	08.02.04
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	LE	DRAWING NO.	REV. B
MFG. APPR.	MP	D3724	SHEET 1 OF 2
APPROVED	MP	TITLE	SCALE
DE APPR.		STEP ASSY	NTS
DATE	08.02.26	COPYRIGHT © 2008 BY DART AEROSPACE LTD <small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

